

U.S. Navy Fact Sheet

Sonar and Marine Mammals

The Need for Active Sonar Training

The U.S. Navy is a responsible steward of the environment in which we operate, and we recognize the need to protect marine life. At the same time, the proliferation of modern, quiet submarines in recent years has increased the Navy's need to use active sonar to protect our Sailors and Marines at sea.

- Dozens of navies around the world possess and continue to obtain modern submarines. These extremely quiet vessels pose a **serious threat to national security**, the safety of our armed forces, and our nation's economic vitality.
- Active sonar is the **only effective means** available today to detect, track, and target modern subs under all ocean conditions.

Understanding Sonar in Context

The U.S. Navy recognizes that active sonar may affect marine mammals under certain conditions. However, it is important to recognize that numerous sounds and other factors in the ocean environment likely have a greater impact.

- Some claim that U.S. Navy sonar is a major cause of marine mammal strandings. However, even considering incidents with only circumstantial evidence of sonar involvement, sonar-related strandings occur very rarely. **Placed into context** with the thousands of strandings that occur every year around the world, it is clear that **many other factors are being ignored**.
- Often overlooked causes of strandings include **fishery entanglements, pollution, disease, parasite infestation, ship strikes, trauma, and starvation**. Strandings also occur after unusual **weather or oceanographic events**.
- A recently publicized report by the United Nations Environment Programme (UNEP) rated sonar **last** among current threats to dolphins, porpoises and related species. Sonar was reported to threaten only about 4 percent of these species, compared with **70 percent endangered by fishing and 56 percent by pollution**. (<http://www.unep.org>, "Fishing Nets Major Risk for Small Cetaceans").
- Only about 90 U.S. Navy ships are equipped with active sonar. Active sonar is used sparingly because it reveals the sending ship's position. Navy ships prefer to use passive sonar the majority of the time.
- Approximately **15,000 large ships** ply the world's oceans daily. In contrast, about **128 U.S. Navy ships** and **22 U.S. Navy submarines** are presently underway. About **58%** of U.S. Navy ships and all subs are equipped with active sonar, which is used sparingly (approximately **1%** of the time).
- Worldwide naval use of active sonar has been correlated with the stranding of approximately 50 whales during the **10-year period** from 1996-2006. To help put this number in perspective, this equates to less than **1/4 of 1%** of the **3500+ strandings** that occur each year on U.S. shores.

Navy Marine Mammal Protection Efforts

The U.S. Navy exercises caution when operating in areas likely to contain marine mammals. Efforts to minimize potential effects on marine mammals include the following:

- **Tracking historical trends** of marine mammal populations in geographic areas where our ships operate
- Utilizing **software tools** that help operators determine if an operating area has any particular aspects that could lead to harming a marine mammal. This allows ships and aircraft to analyze the training area where a specific exercise will take place and then use protective measures as appropriate.
- **Scanning for animals** with passive sonar, trained shipboard lookouts and available airborne assets prior to commencing an exercise. Navy lookouts are skilled in spotting small objects at sea under all conditions.
- **Reducing sonar levels** to 25% of operating power if whales or dolphins are detected within 450 yards of a Navy vessel's sonar dome
- **Ceasing use of active sonar** if a marine mammal is detected within 200 yards of an active source

The Navy's Marine Mammal Research

- The U.S. Navy is a world leader in marine mammal research, and spends **\$10 - \$14 million** annually on marine mammal research programs.
- In 2004 and 2005, U.S. Navy-funded research produced approximately **65 peer-reviewed articles** in professional journals. Publication in open professional literature with thorough peer review is the benchmark for quality research.
- U.S. Navy-funded research has been **favorably reviewed** by three National Research Council panels over the past six years. It was also reviewed three times during that same period by **panels of independent experts** that returned **strongly favorable** conclusions concerning the quality of research emerging from the program.

Navy and Environmental Compliance

- Navy's policy is to operate **in compliance** with environmental laws. To this end, we analyze the **potential effects** of our training and operations on the environment and **cooperate with environmental regulatory agencies** as appropriate based on those effects. We seek **authorization** from the National Marine Fisheries Service under the Marine Mammal Protection Act, and/or **consult** with regulators under the Endangered Species Act, as required for our military readiness activities.

Additional Information

www.whalesandsonar.navy.mil

www.onr.navy.mil



Navy Office of Information (CHINFO)
1200 Navy Pentagon, Room 4B463
Washington, DC 20350-1200
703-697-5342
ryan.perry@navy.mil